PTO/SB/05 (08/03)
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UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

AM	00004 4004							
Attorney Docket No.	62004-1851							
First Inventor	Mule, et al.							

BACKPLANE, PRINTED WIRING BOARD, AND/OR MULTI-CHIP MODULE-LEVEL OPTICAL INTERCONNECT LAYER HAVING EMBEDDED AIR-GAP TECHNOLOGIES AND METHODS OF FABRICATION

Express Mail Label No. EL 993859156 US

1. X Feet Transmittal Form (et g. PTOSEVT) Total Pages 7	APPLICATION ELEMENTS See MPEP Chapter 600 concerning utility patent application contents					ADDRESS TO: Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450									
Applicant claims small entity status. See CFR 1.27 3. X Specification Spe	1.	Х						7. CD-ROM or CD-R in duplicate, Program (Appendix)					arge table or Co	The Companies	
3. X Specification Total Pages 28 a. Computer Readable Copy (CRF) Copy CRF Capy CRF CRF CAPY CRF CAPY CRF CAPY CRF CAPY CRF CAPY CRF CAPY C			•	• •	· · · · · · · · · · · · · · · · · · ·				8. Nucleotide and/or Amino Acid Sequence Submission					e Submission	18. F
- Cross Reference to Related Applications Statement Regarding Fed. Sponsored R&D Reference to sequence listing, a table, or a computer program isting appendix Background of the invention Birled Summary of the invention C. Claim(s) - Computer program isting appendix - Claim(s) - Claim(s	3.	X			set forth below)	[Total Pages	28]]						Copy (CRF)	8 1734
- Reference to sequence listing, a table, or a computer program listing appendix - Background of the Invention - Brief Summary of the Invention - Brief Description of the Drawings (If filed) - Detailed Description - Collings - Coll	 Cross Reference to Related Applications 						b. Specification Sequence Listing on:					1601			
Background of the Invention Brid Summary of the invention Brid Description of the Drawings (if filed) Detailed Description Claim(s) Abstract of the Disclosure AccompanyING APPLICATION PARTS 9. X Assignment Papers (cover sheet & Documents(s)) Total Sheets 10 / 10. 37 CFR 3.73(b) Statement Member and assignment Papers (cover sheet & Documents(s)) Total Pages 4 / 11. English Translation Document (if applicable) Bridge Altorney Altorney Altorney 12. X Information Disclosure Bridge Altorney 13. Preliminary Amendment 14. X Return Receipt Postcard (MPEP 503) Signed statement attached deleting inventor(s) named in the prior application, see 37 CFR 1.58(d)(2) and 1.33(b). 15. Certified Copy of Priority Document(s) named in the prior application, see 37 CFR 1.76 Application Data Sheet under 37 CFR 1.76 Application Data Sheet under 37 CFR 1.76 Continuation Divisional Continuation C		 Reference to sequence listing, a table, or a 								i		CD-ROM or C	CD-R (2 copies)	; or	
- Brief Description of the Drawings (If filed) - Detailed Description - Claim(s) - Claim(s) - Abstract of the Disclosure - Accompany Ying Application - I Total Sheets - I D J D.			-	Background of th	e Invention	1.							Paper		
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Application Data Sheet. See 37 CFR 1.76 18. If a CONTINUING APPLICATION, check appropriate box, and supply the requisite information below and in a preliminary amendment, or in an Application Data Sheet under 37 CFR 1.76: Continuation Divisional Continuation-in-part (CIP) of prior application No: 10/135,314. Prior application information: Examiner Phan T. H. Palmer Group / Art Unit: 2874 For CONTINUATION OR DIVISIONAL APPS only, the entire disclosure of the prior application, from which a coth declaration is supplied under Box 5b, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. This incorporation can only be relied upon when a portion has been inadvertently omitted from the submitted application parts. 18. CORRESPONDENCE ADDRESS 18. Correspondence address below: NAME Christopher B. Linder, Ph.D. Thomas, Kayden, Horstemeyer & Risley, L.L.P. ADDRESS 100 Galleria Parkway Suite 1750 CITY Atlanta STATE Georgia ZIP CODE 30339-5948 COUNTRY U.S.A. TELEPHONE 770-933-9500 FAX 770-951-0933 Name (Print/Type) Christopher B. Linder, Ph.D. Registration No. (Attorney/Agent) 47,751				name	d in the prior app	olication,	ventor(s)		16.						
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This collection of information is required by 37 CFR 1.5. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 1.22 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

FEE TRANSMITTAL for FY 2004

Effective 10/01/2003. Patent fees are subject to annual revisions.

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT 896.00

	Complete If Known							
	Application Number	To be assigned						
	Filing Date	December 11, 2003 (4/29/02 Parent)						
	First Named Inventor	Mule, et al.						
	Examiner Name	Phan T.H. Palmer (Parent)						
_	Group / Art Unit	2874 (Parent)						
	Attorney Docket No.	62004-1851						

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1001 770	2001 385	Utility Filing Fee	770.00	1402	200	2402	145	appeal	
1002 340	2002 170	Design Filing Fee		1403	290	2403	145	Request for oral hearing	
1003 530	2003 265	Plant Filing Fee		1451	1,510	1451	1,510	Petition to institute a public use proceeding	1
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1004 770	2004 385	Reissue Filing Fee						unavoidable	
1005 160	2005 80	Provisional Filing Fee		1453	1,330	2453	655		1 .
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1205 18	2205 9	original patent **Reissue claims in exce	ess of 20	Other f	ee (specify	۸			
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Typed or Printed Name Number Signature

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This collection of information is required by 37 CFR 1.17 and 1.27. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 37 USC 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application from the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450 DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Mule, et al.

For:

BACKPLANE, PRINTED WIRING BOARD, AND/OR MULTI-CHIP MODULE-LEVEL OPTICAL INTERCONNECT LAYER HAVING EMBEDDED AIR-GAP TECHNOLOGIES AND METHODS OF FABRICATION

CERTIFICATE OF EXPRESS MAIL

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

Sir:

Enclosed for filing in the above case are the following documents:

Return Postcard Utility Patent Application Transmittal Page Fee Transmittal Page Utility Patent Application Consisting Of:

22 Pages of Specification

6 Pages of Claims (Claims 1-1)

l Page of Abstract

10 Pages of Formal Drawings (Fig(s), 1A-9I)

Preliminary Remarks Declaration (copy, executed)

Assignment & Recordation Cover Sheet

Information Disclosure Statement, Form PTO 1449 and 68 References Credit Card Authorization in the Amount of \$896.00

Further, the Commissioner is authorized to charge Deposit Account No. 20-0778 for any additional fees required. The Commissioner is requested to credit any excess fee paid to Deposit Account No. 20-0778.

Respectfully submitted,

Christopher B. Linder, Reg. No. 47,751

THOMAS, KAYDEN, HORSTEMEYER & RISLEY, L.L.P.

100 Galleria Parkway, N.W.

Suite 1750

Atlanta, Georgia 30339-5948

Our Docket No: 62004-1851

I hereby certify that all correspondence listed above are being deposited for delivery to the above addressee, with the United States Postal Service "EXPRESS MAIL POST OFFICE TO ADDRESSEE" service under 37 CFR §1.10 on the date indicated below:

The envelope has been given U.S. Postal Service "Express Mail Post Office To Addressee"

Package # EL 993859156 US.

Date: <u>DEC.</u> 1,2003